# Ejercicio12sec3.2grossman2ed

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diga si el siguiente vector es un vector ortogonal.

$u = 2i + 3j; v = 6i - 4j$

```
----------------------------------------------------------------------
| Sage Version 3.4, Release Date: 2009-03-11                         |
| Type notebook() for the GUI, and license() for information.        |
----------------------------------------------------------------------
Sage Version 3.4, Release Date: 2009-03-11
```

```
sage] u=vector([2,3])
sage] v=vector([6,-4])
sage] u
```

$(2, 3)$

```
sage] v
```

$(6, -4)$

```
sage] u*v
```

$0$

```
sage]
```

$u.v = 0 = \cos\theta = 0 = \theta = \pi/2 = \text{son ortogonales}$

la respuesta e sque si son ortogonales.